Governor's Commission
Subcommittee: Medical Assets and Resources – Education, Training and Research

The purpose of the assets and resources sub-committee was to determine the strengths and weaknesses of medical and healthcare education, research, and training in Nevada. These notes have been culled from a "raw" list of strengths and weaknesses produced during several three-hour brainstorming sessions. The brainstorming was based on presentations made to the Commission by a variety of state, private and public groups (including back-up data and statistics) and on participating attendees own knowledge.

- Strengths: What is in place and working well
- Weaknesses: What is missing or not working
- Opportunities: What can we capitalize on and what improvements can we make
- Threats: What pressures could be impediments to success

The good news is that much of the group's discussion mirrored the Larsen Allen Health Science Center Report to the Regents and the focus groups conducted by the Nevada Health Plan Project which is run and sponsored by the Nevada State Legislature. **There is far more agreement than disagreement between the different groups currently looking at the state of Nevada's healthcare**. Going forward, the challenge will be agreeing on an appropriate path to follow and reaching a consensus on the prioritization of the issues / opportunities.

STRENGTHS AND WEAKNESSES

I. MEDICAL AND HEALTHCARE EDUCATION AND TRAINING IN NEVADA: STRENGTHS

Note: the group chose to combine education and training into one discussion

A. Education/ Schools

1. Professional:

a) Wide variety of public and private health education programs available

(1) Public medical school is focused on expanding health care professional education through Health Science Center concept

(2) Have a pharmacy school, school of public health dental school, physician assistant's school, etc.

b) Public school tuition costs low (both a strength and a weakness)

c) Increasing demand; rising number of applicants seeking admittance in programs

d) Quality of graduates

e) Primary care practice curriculum

2. Nursing:

a) Fast tracked nursing education programs exist

b) Many schools offer nursing programs (programs listed in raw data)

c) Number of nursing enrollments doubled over several years 2001-05 (while a good start to improve the number of nurses in the State, does not fulfill the State's requirements for more nursing)

d) Focused effort to increase nurses worked – an example of partnerships working

e) TOURO masters program, UNLV Ph.D. in nursing

f) Hospital support of nursing higher education programs (tuition reimbursement)

B. Residency Programs

1. Residency programs in State are all accredited

2. New programs identified (reallocation of CMS slots)

3. Hospitals and schools willing to expand programs

C. Public/Private Partnerships

1. Partnership with State, hospitals, education

2. Clinical care collaboration (between higher education and health care providers)

3. Efforts to identify and recruit adjunct professors from physician community

D. Nevada Commitment/Financing

1. Recognition that all interests need to talk

2. Nevada "can do" attitude

3. Entrepreneurial spirit

4. Philanthropy strong / Private sector financing available

5. Governor and State legislature acknowledgement that spending needs to increase

6. Flexibility on private side to increase number of student slots

E. Technology

1. Education systems now have a virtual library – attracts faculty and students

2. Nevada has technology in place

   a) Super Computer

   b) Tele-medicine: consultations via telecommunications

   c) Have established vast infra-structure, already in place, excellence in technology and can move information around the state. (Built by S.C.S)

   d) Online education (including nursing online courses)

   e) P.A. programs- post grad medical education

   f) DaVinci robot

F. Miscellaneous

1. Great job opportunities at all levels and in all healthcare professions (desirable place to live and work)

2. Star physicians (highly qualified health care professionals in all parts of the State)

3. Licensing standards result in quality healthcare professionals (also a weaknesses in that the residency requirement keeps high quality professionals form coming to the State)

4. Standardized hospital credentialing among hospitals

5. 3rd highest physician retention rate of all States for UNSOM residents

6. Nevada's ability to adapt to change and cultural shifts

II. MEDICAL AND HEALTHCARE EDUCATION AND TRAINING IN NEVADA: WEAKNESSES

A. Education/ Schools

1. Professional

a) Medical School support for expansion is embarking at a late date (in terms of the population growth) despite recognition of the need to expand and plans previously developed by the medical school.

b) Higher education more open to partnerships than in the past (still a weakness)

c) We do not do a good job of articulation – bachelors to masters, masters to doctorate does not fit well together

d) Lack of post graduate fellowship (and residency) programs in many health care specialty areas

e) Have been co-dependent on other States to educate and provide healthcare professional workforce

f) No strategy for encouraging careers as health professionals

g) Limited availability of faculty; rural areas lack of residencies and lack of faculty

2. Nursing

a) Not part of the "Nursing Licensure Compact"

b) High drop out rate in nursing program / low graduation statistics

c) Salary parity issues between teaching nurses (with advanced degrees) and bedside nurses

d) Did not increase nursing faculty commensurate with increase in students

e) Even with program growth Nevada nursing still ranks 49th in United States

B. Residency Programs

1. Cap on CMS funding and residency spots

2. Residency number shortage

3. No staff or funding to increase number of available slots

C. State Wide Shortages

1. We need more healthcare professionals of all types in Nevada

2. Length of time for licensing and residency requirement

D. Cost of Living

1. Increasing cost of living in relation to wages – causes recruitment and retention problems

2. Lack of affordable housing (for students, healthcare professionals and faculty) – with acknowledgement that there are some innovative private programs including Washoe Health System program to provide affordable residential housing for Washoe employees (50% for current employees, 50% for new employees to help recruitment)

E. Financing

1. Lack of cohesive financial planning and requests

2. Not enough revenue coming into fund medical education

3. Restrictive Graduate Medical Education funding

4. Funding to school is low

F. Miscellaneous

1. Historical North/ South geographic / psychological divide / rivalry

2. Population unaware of good quality of physicians; lack of quality of care reputation

3. Malpractice environment (with acknowledgement that the Tort reforms in 2002/2003 will help – once the court challenges are final)

4. Aging of physician/nursing populations

5. Math and Science test results in Nevada schools are low

6. Weakness for Technology: confidentiality with records

III. MEDICAL AND HEALTHCARE RESEARCH AND FUNDING: STRENGTHS

A. Education/ Schools

1. System of Higher Education's acknowledgment of need for research orientation
2. Productive faculty
3. Prominent researchers
4. Commitment to reinvesting in research

B. Community/Private Efforts

1. Nevada Cancer Institute (including, but not limited to, focus on clinical trials)
2. Ruvo Alzheimer's Clinic
3. "Best in class" physician groups (e.g., Neurosciences Institute)
4. Efforts of Nevada Development Authority - creating high quality biomedical infrastructure
5. Pockets of sophisticated research (weakness: no-one really knows about our good programs)
6. Community hospitals and centers of excellence
7. Entrepreneurial spirit of Nevada
8. Untapped source of information for studies
9. Southern Nevada AHEC coordinating community based health research

IV. MEDICAL AND HEALTHCARE RESEARCH AND FUNDING: WEAKNESSES

A. Education/ Schools

1. Limited translational research (all levels)
2. Lack of senior faculty/ researchers
3. Lack of research facilities/ incubator space/ vivarium space/ lab space
4. Historical record of limited interest in partnering and collaborating with private/ outside third parties (this is changing)

B. Community / Private Efforts

1. "Infant" status of private development

2. Focus of State marketing is on "entertainment / tourism" as opposed to marketing the state/ community quality of life -- what we actually have here

C. Funding

1. Growing yet limited NIH research grants

2. Availability of funds to aggressively recruit top quality researchers (true for faculty also)

D. Coordination of Efforts

1. No comprehensive coordinated process for assessing need and determining priorities

2. Lack of organization/ reception

3. Communication / politics; no one knows who is doing what or handling what

4. State policies are not research friendly

5. No integrated database for collecting health services, diseases, healthcare professionals (good at clinical data collection)

E. Miscellaneous

1. Seeming desire to limit competition (from multiple current community stakeholders)

F. OTHER (not directly related to medical and healthcare education, research, and training in Nevada)

1. Growing and aging population; also increasing racial and ethnic diversity (lack of bilingual healthcare professionals, cultural divides)

2. Growing and aging professional workforce

3. High level of uninsured population; poor population health

OPPORTUNITIES AND THREATS

V. MEDICAL AND HEALTHCARE EDUCATION AND TRAINING IN NEVADA: OPPORTUNITIES

Note: we kept education and training combined to mirror the strengths and weaknesses conversation

A. Education/ Schools

1. Professional:

a) Create a Health Sciences Center model

b) Increase the size of UNSOM - larger program (more students, new curriculum, greater faculty breadth and depth, expand training sub-specialties based on the needs of the community) and/or focus entirely on primary care physicians

(1) Over time increase GPA, MCAT scores

(2) Increase private partnerships and alliances

(3) Utilize the current relationship with community hospitals for a global academic program

(4) Expand pool of medical educators by recruiting and partnering with community based physicians

(5) Create an accelerated medical school program between the University system and UNSOM (e.g., graduate college in 3 years; straight to medical school)

c) Look at mechanisms for influencing CMS cap policy

d) Increase the number of residency programs

e) Increase the number of medical and surgical specialty training

f) Identify hospitals willing to assume additional training responsibilities for undergraduate medical education, residency and fellow ship training

g) Create new hospital GME programs (e.g., similar to existing programs at Valley, Sunrise, UMC)

h) Create dual accredited programs - ACGME/AOA

B. Public/Private Partnerships

1. Attractive business climate to draw private partners to Nevada in the health sciences areas such as biotechnology, informatics, telecommunications, and pharmaceuticals.

2. Create a concerted public/private partnership alliance (e.g., Georgia Research Alliance)

3. Creative models to address cost of living issues (e.g., Washoe Health System subsidized housing program)

4. Examine and utilize public/private partnerships to determine/develop more efficient ways of doing business

5. Outreach to schools for interest in career mentoring programs

6. Create a culture of academia (including working to attract more large scale medical and academic conferences into the State)

C. Nevada Commitment/Financing

1. Increase University funding

2. Recognized need and growing support is evident for improvement in health sciences education, research and training among essential constituencies in higher education, legislature, and the business community.

3. Expand state healthcare funding (operations and capital)

4. May be room to raise tuition at UNSOM

5. Offer salaries to reflect competitive, market based packages

6. Set aside special funds to attract top level academic faculty

7. Changing structure of medical tuition funding

D. Miscellaneous

1. Take teleconferencing and tele-diagnosing to the next level and through centers of excellence

2. Utilize Electronic Medical Record Systems – RHIO and shared databases

3. Better brand Nevada's healthcare efforts (quality, what we have here)

4. Develop States' personality (e.g. Geriatric medicine, ethnic issues)

5. Remove funding blocks from University request system

6. Improve articulation across the system

7. Refocus Millennium scholarships on health care professionals and educators

8. Broaden K-12 match/science competency, mentoring programs, etc.

9. Develop statewide recruiting faculty and researcher program/package

10. Small size of state allows diverse groups to discuss

11. Capitalize on the current cooperative/collaborative atmosphere in the State to move things forward

12. Create/coordinate "centralized" tools to expand State's ability to recruit health care professionals

VI. MEDICAL AND HEALTHCARE EDUCATION AND TRAINING IN NEVADA: THREATS

A. Education/ Schools

1. Professional

a) Statewide leadership in the health sciences fails to energize the participants or fails to clearly articulate a vision for success; Current coalition of supportive participants at all levels of the discussion falters prior to completion of the planning process.

b) No consensus is achieved on strategic directions between the various planning committees currently involved in discussions on health sciences education, research and training.

c) Nevada's three year continuous residency requirements do not permit experienced practitioners to qualify (to teach or practice)

B. Residency Programs

1. CMS caps are not lifted

2. No increase in residency programs

3. GME financing not expanded

C. State Wide Shortages

1. Nevada's three year continuous residency requirements do not permit experienced practitioners to qualify (to teach or practice)

2. Possibility of lower standards and quality of care issues

D. Cost of Living

1. Cost of living continues to increase

2. Escalating land/construction costs makes building new facilities even more difficult

3. Salary disparities between public and private and within the University system

E. Financing

1. Necessary State and/or private funding for the health sciences does not materialize.

2. University health sciences research funding is negatively impacted by limits in federal funding for the health sciences (e.g. NIH and NSF budget decreases).

3. Cost to build Health sciences Center detracts from other needed initiatives

4. Anti-tax mentality may limit ability to fund various initiatives

5. Lack of clear articulation regarding the meaning of increased healthcare funding

VII. MEDICAL AND HEALTHCARE RESEARCH AND FUNDING: OPPORTUNITIES

A. Education/ Schools

1. Based on the fairly recent development of professional curricula in Dental Medicine, Public Health, Pharmacy, and other allied health sciences coupled with growing university research infrastructure in the basic and physical sciences development of new multidisciplinary (and multi-institutional) programs such as clinical and translational sciences is occurring. However, there a long way to go.

2. Create a focused effort to attract more senior faculty and researchers with translational and/or clinical experience

3. Expand research model to include not only basic science, but clinical, education research (how you train), health services

4. Focus on commercially viable translational and clinical research

5. Expand opportunities to review data for quality outcomes

6. Create more research infrastructure (development a space, personnel, etc. to support a rich clinical question)

B. Community/Private Efforts

1. Impressive private efforts are and have been underway in the State for some time (Nevada Cancer Institute, Neurosciences Institute, Ruvo Alzheimer's), we should be able to continue and capitalize on those efforts

2. Attract more specialized physicians and researchers into the State (capitalize on the existing centers of excellence.)

3. Nevada is a great place to live and work – should be able to attract and market to top researchers (and faculty) with competitive packages and the opportunity to make changes, start new programs, etc.

4. Undertake an effort similar to the California Institute for Regenerative Medicine (training the next generation of stem cell researchers). In the case of NV, we could identify a different type of research (e.g. Brain scanning) which is under funded and somewhat unique to NV's others efforts (tie in with Ruvo, NNI, NVCI, UNLV super computer). The State could issue bonds to fund researchers (even if smaller than CA's efforts say $500M to a $1B) in a unique area (would require voter's approval, etc.).

5. Attract more private and philanthropy dollars (e.g., Pharmaceutical Industry. Gates Foundation, Milken Foundation, etc.)

C. Government

1. Identify ways to attract more federal funding (e.g., National Institutes of Health, Department of Veteran's Affairs, Department of Energy, National Science Foundation, etc.)

2. Coordinated index of information of research

D. Miscellaneous

1. Enhance facilitation of technology transfer activities

2. Create better grant writing competencies

3. Utilize (and market) Nevada-based population studies

4. Ability to increase square footage of laboratory space , SOM space and vivarium, studies

VIII. MEDICAL AND HEALTHCARE RESEARCH AND FUNDING: THREATS

A. Education/ Schools

1. UNSOM fails in its efforts to grow and expand; private groups cannot do it alone

2. Research grant dollars do not increase

3. Community / Private Efforts

4. Reliance on grants (as opposed to State funding) could put rural communities at a disadvantage

B. Funding

1. Private philanthropy becomes divided into small projects – less bang for buck

2. Gifts/endowments decrease

3. Coordination of Efforts

4. Private efforts discounted/ignored by the University and/or new Health Sciences Center

IX. OTHER OPPORTUNTIES (not directly related to medical and healthcare education, research, and training in Nevada)

A. Develop physician and nursing incentive programs for rural and underserved areas of the States

B. Begin recruitment at earlier levels to encourage selection of careers in health care

C. Join the "Nursing Licensure Compact"

D. Evaluate health care professional licensing boards

E. Better marketing/promotion of tertiary, quaternary medical facilities and internal Las Vegas/Nevada physician abilities

F. Improve referral patterns between North and South

X. <u>OTHER THREATS</u> (not directly related to medical and healthcare education, research, and training in Nevada)

A. TORT reform could fail in court

B. Focus on disease care – not prevention and public health

C. Trend toward "boutique" medical practices

D. Inability of healthcare to keep up with growth will affect the State's growth overall